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REMARKS

Prior to the present response, claims 1-30 were pending. By way of the present response, claims 1, 7 and 13 are amended, claims 19-30 are canceled without prejudice or disclaimer, and new claims 31-36 are added. Accordingly, claims 1-18 and 31-36 currently are pending. Support for the amendments is found throughout the original disclosure, for example, in paragraphs 0014, 0016 and 0018, and in Figures 2-3.

In the action, the Office finalized the restriction requirement dated August 16, 2005, and has withdrawn claims 19-30 from consideration. As noted above, claims 19-30 are canceled. Applicants reserve the right to pursue the subject matter of canceled claims 19-30 in a divisional application.

The action also includes a rejection of claims 1, 6, 7, 12, 13, and 18 under 35 U.S.C. § 102(b) as being anticipated by Bennett et al. (U.S. 5,872,781); a rejection of claims 2-5, 8-11, 14, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Bennett et al. in view of Allmond et al. (US 5,754,552); a rejection of claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Bennett et al. in view of Patel et al. (U.S. 5,883,894); and a rejection of claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Bennett et al. in view of Patel et al. and Allmond et al. In connection with independent claims 1, 7 and 13, the Office asserts that Bennett et al. discloses a method for identifying one of a plurality of communication channels for communication between one of a plurality of devices and a server, the method comprising: monitoring each of the plurality of communication channels (figure 2, item 34) between the plurality of devices and the server (col. 6, lines 27-30); determining whether at least one of the plurality of communication channels is being used for the transmission link pulses by the server, wherein the presence of link pulses on one of the communication channels indicates that that particular communication channel is not currently being used for data transmission by the server and is available (col. 6, lines 27-34); and establishing a connection between the device and the server using one of the available communication channels determined to have the link pulses (col. 6, lines 38-40).

Applicants respectfully submit that the Bennett et al., Allmond et al., and Patel patents alone or in combination fail to describe, teach or suggest the combinations of features set forth in the amended claims, including "monitoring each of the plurality of communication channels between the plurality of devices and the server, wherein each monitored

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communication channel is connectable to a respective port among a plurality of ports of the server” as recited in amended claims 1 and 7, or “a monitoring system that monitors each of the plurality of communication channels between the plurality of devices and the server, wherein each said channel is connectable to a respective port among a plurality of ports of the server,” as recited in amended claim 13.

The Bennett et al. patent is directed to an adaptive repeater including a plurality of ports 34, as shown in Figures 1 and 2. According to Bennett et al., each device belongs to one of two domains 14 and 16, which respectively correspond to 10-Mbps and 100-Mbps communications protocols (column 2, lines 31-35). Devices 18, 20 and 22 in domain 14, and devices 26, 28 and 30 in domain 16 each connect to one repeater port 34 connected to a port link 52, which in turn is connected to an interface circuit 50. In operation, a data device transmits a link pulse to an interface circuit, which responds by performing auto-negotiation to detect the communications protocol used by the data device (see column 6, lines 25-36). Based on the detected protocol, the interface circuit establishes a link with the data device using either a bus 56 dedicated to a first communications protocol or a bus 60 dedicated to a second communications protocol (see, Figure 2). The bus 56 is connects to each of the other interface circuits 50 along links 54, and the second bus 60 connects to each of the other interface circuits 50 along link 58. However, Bennett et al. shows only one link between each data device 18, 20, 22, 26, 28 and 30 and a respective interface circuit 50 (e.g., see Figure 1). Moreover, Bennett et al. fails to disclose anything whatsoever regarding a multiple-port server. Hence, Bennett et al. does not disclose the features of “monitoring each of the plurality of channels ... each monitored communication channel is connectable to a respective port among a plurality of ports of the server ...,” as recited in amended claims 1 and 7. For analogous reasons, Bennett et al. likewise fails to describe “a monitoring system that monitors each of the plurality of communication channels between the plurality of devices and the server, wherein each said channel is connectable to a respective port among a plurality of ports of the server ...,” as recite in claim 13.

The Allmond et al. patent does not remedy the shortcomings pointed out above with respect to independent claims 1, 7 and 13. Like Bennett et al., Allmond et al. teaches a communication protocol detection system and method for network systems for enabling a network system to detect and interface on or more network devices operating

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within domains pertaining to different communication protocols. (Abstract). As described in Col. 7, lines 26-42, Allmond et al. teaches that when a network device is plugged into the network, that device will continually send link pulses. Transceivers operating on 10Base-T and 100Base-T protocols detect the link pulses from the devices and assert the signal to a processor. The processor then enables either the 10Base-T transceiver or the 100Base-T transceiver depending on the protocol of the network device. However, Allmond et al. is silent with respect to monitoring a plurality of communication channels that are connected to a respective port of a plurality of ports of a single server device. As with Bennett et al., the Allmond et al. system and method appears to include monitoring of one communication channel connectable to only one port of a device (e.g., see the one-to-one relationship of devices to ports between items 114 and 110 in Figure 1, and between items 306, 310, 314 and 318 and connectors 322 in Figure 3). Hence, Allmond et al. teaches to establish a connection to only one port of each network device using the appropriate protocol, and not use of monitoring each of a plurality of communication channels between the plurality of devices and the server, and that each monitored communication channel is "connectable to a respective port among a plurality of ports of the server," as recited in amended claims 1, 7 and 13.

Patel also does not teach the claimed features missing in the Bennett et al. and Allmond et al. documents. With reference column 4, lines 20-31, the Patel et al. patent describes a system in which shared auto-negotiation logic for a multiple port intermediate network device including a repeater and a shared auto-negotiation unit is coupled to a set of the ports rather than implementing an auto-negotiation state machine in each of the ports. (See col. 4, lines 2-4 and 32-40.) However, with reference to Figure 1, Patel et al. shows only one duplex link 106 per network end station device 107. Thus, similar to Bennett et al. and Allmond et al., Patel et al. appears to disclose only one port connectable between a network device and another network device. Thus, Patel et al. also fails to disclose use of monitoring each of a plurality of communication channels between the plurality of devices and the server, and that each monitored communication channel is "connectable to a respective port among a plurality of ports of the server," as recited in amended claims 1, 7 and 13.

Contrary to the teachings of the references described above, claims 1, 7, and 13 of the present invention recite a system, method, and computer readable medium that enables identification of identifying at least one of a plurality of communication channels

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available for communication between one of a plurality of devices and a plurality of ports of a server. Each communication channel is connectable to a respective port on the server, which allows for monitoring each of a particular port of the server associated with the channel, determining whether at least one of the plurality of communication channels and associated port is being used for the transmission of link pulses by the server, and establishing a connection between the device and the server using one of the available communication channels associated with the port determined to have the link pulses. These features provide a number of advantages over the teachings of the references, including enabling equipment in a network to be conveniently rearranged, added or removed as desired, enabling easier servicing of network communication buses since the buses need not be bundled together, lowers costs, and provides increased reliability since network equipment may be provided with a simple, universal interface arrangement. As pointed out above, the repeater devices disclosed in Bennett et al., Allmond et al. and Patel et al. do not teach or suggest the type of server set forth in the claims that provides a number of ports connectable to a number of devices along respective communication channels.

In view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw the rejection of independent claims 1, 7 and 13. Since claims 2-6, 8-12, and 14-18 depend from and contain the limitations of claims 1, 7 and 13, they are distinguishable over the cited reference and patentable in the same manner.

Additionally, it is respectfully submitted that the subject matter set forth in new claims 31-36 is allowable at least because they each depend from one of allowable claims 1, 7 and 13, are further because the additional features are not taught or suggested in the Bennett et al., Allmond et al. and Patel et al. patents, whether considered individually or in any combination.

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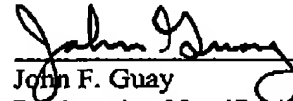
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In view of all of the foregoing, Applicants submit that this case is in condition
for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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